

## CLAIMS

### What is claimed is:

1. An intervertebral spacer having an osteoinductive securing surface element, the intervertebral spacer comprising:

a spacer body, said spacer body comprising at least one vertebral body contact element for securably mating with a concave surface of an adjacent vertebral body endplate;

the vertebral body contact element being deformably reshapable under anatomical loads such that the vertebral body contact element conformably deflects within said concave surface to securably engage the vertebral body endplate;

the vertebral body contact element being secured to the spacer body by being buried at its perimeter within a coating applied to the spacer body.

2. The artificial intervertebral disc of claim 1, wherein the vertebral body contact element comprises a wire mesh having a resting shape of a dome convexly extending from the spacer body.

3. The artificial intervertebral disc of claim 2, wherein the vertebral body contact element has a convexity depth approximating a concavity depth of the concave surface.

4. The artificial intervertebral disc of claim 2, wherein the vertebral body contact element has a footprint approximating a footprint of the concave surface.

5. The artificial intervertebral disc of claim 2, wherein the coating is a plasma spray.

6. The artificial intervertebral disc of claim 2, further comprising an osteoconductive feature adjacent the wire mesh.

7. The artificial intervertebral disc of claim 6, wherein the coating has the osteoconductive feature.

8. The artificial intervertebral disc of claim 1, wherein the vertebral body contact element has a resting shape of a dome convexly extending from the spacer body.

9. The artificial intervertebral disc of claim 1, further comprising an osteoconductive feature adjacent the vertebral body contact element.

10. The artificial intervertebral disc of claim 9, wherein the coating has the osteoconductive feature.

11. An intervertebral spacer comprising:  
a spacer body including at least one vertebral body contact element for securably mating with an adjacent vertebral body endplate;  
the vertebral body contact element being deformably reshapable under anatomical loads such that the vertebral body contact element deflects against the vertebral body endplate to securably engage the vertebral body endplate;  
a perimetrical region of the vertebral body contact element being buried in a coating disposed on the spacer body.

12. The artificial intervertebral disc of claim 11, wherein the vertebral body contact element comprises a wire mesh.

13. The artificial intervertebral disc of claim 12, wherein the wire mesh has a convexity depth approximating a concavity depth of the concave surface.

14. The artificial intervertebral disc of claim 12, wherein the wire mesh has a footprint approximating a footprint of the concave surface.

15. The artificial intervertebral disc of claim 12, wherein the coating is a plasma spray.

16. The artificial intervertebral disc of claim 12, further comprising an osteoconductive feature adjacent the wire mesh.

17. The artificial intervertebral disc of claim 16, wherein the coating has the osteoconductive feature.

18. The artificial intervertebral disc of claim 11, wherein the vertebral body contact element has a resting shape of a dome convexly extending from the spacer body.

19. The artificial intervertebral disc of claim 11, further comprising an osteoconductive feature adjacent the vertebral body contact element.

20. The artificial intervertebral disc of claim 19, wherein the coating has the osteoconductive feature.